Seattle City Light

About Your Commercial Electricity Bill

Guide to Understanding Your Bill

It may be difficult to read and understand your electricity bill so we are providing explanations to help you. A sample of the bill with call-outs for items #1 through #5 is located on the other side of this page.

1. **Kilowatt-hour** (KWH) measures the amount of electricity used during the billing period. Supplying 1,000 watts continuously for one hour equals 1 KWH of energy.
2. **Kilowatt** (KW) and **Kilovolt-ampere** (KVA) measure the:

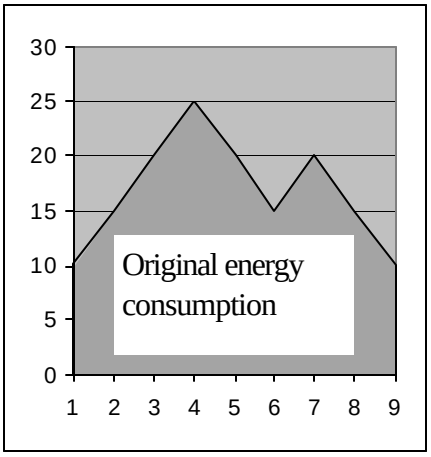
   2.a. **Power demand** or the maximum rate of consumption. When a customer requires a large supply of electricity — even for a brief period — we deliver. Seattle City Light maintains a system large enough to meet the highest demand.

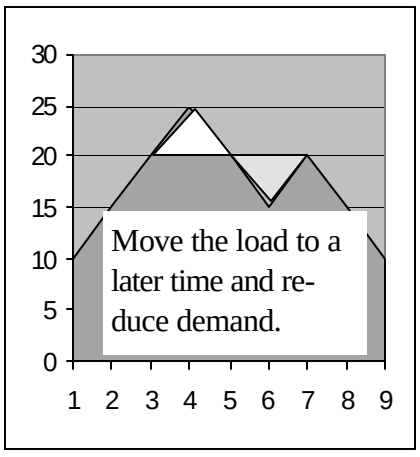
   One 100-watt light bulb operating for 10 hours uses 1 KWH of electricity. We need a 100-watt generator to handle this load. One 1,000-watt light bulb operating for one hour also uses 1 KWH of electricity but we need a 1,000-watt generator to handle the load. The energy used and billed for in each case is the same, however a charge-for-demand is made for the 1,000-watt bulb to help pay for the larger generating capacity needed.

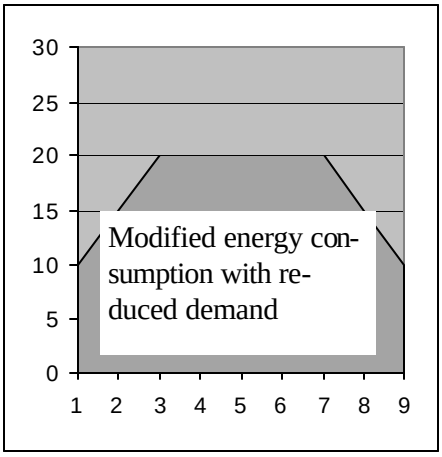
   Customers that use 50 KW of electricity or more, are **charged for demand** as well as for the energy consumed. A demand meter records peak demand, which is averaged over 15-minute intervals throughout each billing period. These data are used to calculate your demand charge, per an established rate schedule.

Can the customer reduce the amount of the demand charge?

After pinpointing when your maximum demand occurs during the day, you may be able to shift some of the load to another time. This would reduce the maximum demand level and, hence, the amount of your demand charges.







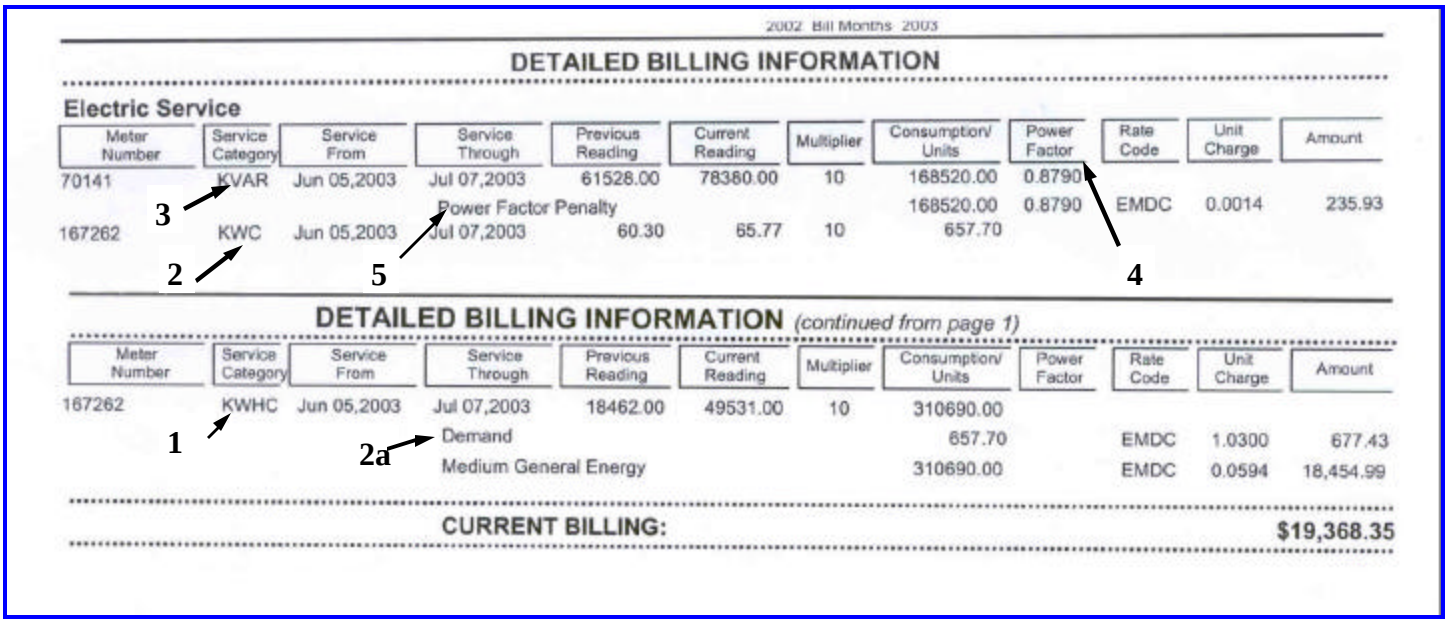
3. **Kilovar-hour** (KVARH) measures reactive kilovolt-ampere hours. With magnetic devices such as transformers and electric motors, current called **reactive power** is required to maintain the magnetism — but it is not usable electricity. It surges back and forth through the meter without registering consumption. Our electricity delivery system is built with the capacity to deliver this reactive power in addition to delivering the electricity used. (measured by watts).

4. **Power factor** is the percentage of usable power, discounting the unusable (reactive) portion. When a customer's electricity has an average monthly power factor of less than 97 percent, Seattle City Light may install an advanced-technology meter to measure the reactive power.

   Common inductive loads which lower the power factor include: motors and coils, transformers, elevators, refrigeration and air handling equipment, lathes, conveyors and computers.

5. We may charge a **power factor penalty fee** in addition to the demand and energy charges.

How can the customer avoid this penalty?
By correcting your power factor. Capacitor suppliers and engineering firms can assist you to determine the optimum power factor correction and to correctly locate and install capacitors in your electrical distribution system.



2002 Bill Months 2003

DETAILED BILLING INFORMATION

Electric Service

Meter Number	Service Category	Service From	Service Through	Previous Reading	Current Reading	Multiplier	Consumption/ Units	Power Factor	Rate Code	Unit Charge	Amount
70141	KVAR	Jun 05,2003	Jul 07,2003	61528.00	78380.00	10	168520.00	0.8790			
			Power Factor Penalty				168520.00	0.8790	EMDC	0.0014	235.93
167262	KWC	Jun 05,2003	Jul 07,2003	60.30	65.77	10	657.70				

3 2 5 4

DETAILED BILLING INFORMATION *(continued from page 1)*

Meter Number	Service Category	Service From	Service Through	Previous Reading	Current Reading	Multiplier	Consumption/ Units	Power Factor	Rate Code	Unit Charge	Amount
167262	KWHC	Jun 05,2003	Jul 07,2003	18462.00	49531.00	10	310690.00				
			Demand				657.70		EMDC	1.0300	677.43
			Medium General Energy				310690.00		EMDC	0.0594	18,454.99

1 2a

CURRENT BILLING: **$19,368.35**

Seattle City Light

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